

WHAT IS CLAIMED IS:

1. An information processing apparatus for processing original data created by a predetermined author, the apparatus comprising:

storing means for storing modification information regarding a modification when the original data is modified; and

modification-assuring-information creating means for creating modification-assuring information for assuring that the modification information is true.

2. The information processing apparatus according to claim 1, further comprising determining means for determining whether the modification information is valid, wherein, when the determining means determines that the modification information is valid, the modification-assuring-information creating means creates the modification assuring information.

3. The information processing apparatus according to claim 1, further comprising original-data assuring-information creating means for storing original-data assuring information for assuring that the original data is an original.

4. The information processing apparatus according to claim 1, further comprising modification processing means for performing a modification process on the original data.

5. The information processing apparatus according to claim 3, wherein the modification assuring information and the original-data assuring information are digital signatures.

6. The information processing apparatus according to claim 4, wherein the modification information includes information for identifying the original data, information for identifying the modification processing means, and information for identifying the modification process performed when the original data is modified.

7. The information processing apparatus according to claim 1, wherein the modification information includes the original data and difference information between the original data and modified data with respect to the original data.

8. The information processing apparatus according to claim 2, wherein the determination by the determining means

is performed using pre-set access permission.

9. The information processing apparatus according to claim 2, wherein the determination by the determining means is performed using a public key of the author of the original data.

10. The information processing apparatus according to claim 3, further comprising managing means for managing the original data, the original-data assuring information, the modification information, and the modification assuring information.

11. The information processing apparatus according to claim 3, further comprising transmitting means for transmitting the original data, the original-data assuring information, the modification information, and the modification assuring information.

12. An information processing apparatus for processing original data created by a predetermined author, the apparatus comprising:

original-data verifying means for verifying that the original data is assured as being an original; and

modification-information verifying means for verifying

that modification information regarding a modification of the original data is assured as being true.

13. The information processing apparatus according to claim 12, further comprising modifying means for modifying the original data in accordance with the modification information when it is verified that the original data is assured as being an original and the modification information is assured as being true.

14. The information processing apparatus according to claim 12, wherein the original-data verifying means verifies a digital signature for the original data and the modification-information verifying means verifies a digital signature for the modification information.

15. A server that is connected with the information processing apparatus according to claim 3 over a network, wherein the server receives and manages the original data, the original-data assuring information, the modification information, and the modification assuring information from the information processing apparatus.

16. An electronic-data management system comprising:  
a plurality of information processing apparatuses which

is connected over a network, each information processing apparatus comprising verifying means for verifying that electronic data that is shared over the network is assured as being an original and for verifying that first modification information regarding a modification of the electronic data is assured as being true;

electronic-data modifying means for modifying the electronic data when the verifying means verifies that the electronic data is assured as being an original and the first modification information is assured as being true;

information creating means for creating second modification information regarding a modification of the electronic data that is modified by the electronic-data modification means and for creating modification assuring information for assuring that the second modification information is true; and

transmitting means for transmitting the second modification information and the modification assuring means over the network,

wherein the plurality of information processing apparatuses cooperates with each other to manage the electronic data.

17. A copyright-product management system having a first information processing apparatus in the possession of

an author of a primary copyright product and a plurality of second information processing apparatuses connected with the first information processing apparatus over a network, the copyright-product management system comprising:

primary-copyright-product distributing means for distributing the primary copyright product from the first information processing apparatus to at least one of the second information processing apparatuses which is in the possession of a user that is authorized by the author, wherein the at least one second information processing apparatus makes a modification to the primary copyright product within a scope of permission granted by the author;

transmitting means for transmitting, to the first information processing apparatus, modification information indicating content of the modification and first modification assuring information for assuring that the modification information is true, wherein the first information processing apparatus receives the modification information and the first modification assuring information and verifies whether or not the received modification information is valid using the first modification assuring information; and

sending-back means for sending, when the received modification information is verified as being valid, the modification information along with second modification

assuring information, which assures that the received modification information is valid, back to the at least one information processing apparatus,

wherein the at least one information processing apparatus that has received the modification information and the second modification assuring information is granted permission to use the modified primary copyright product as a secondary copyright product.

18. An information processing method for processing original data created by a predetermined author, the method comprising:

a storing step of storing modification information regarding a modification when the original data is modified; and

a modification-assuring-information creating step of creating modification-assuring information for assuring that the modification information is true.

19. The information processing method according to claim 18, further comprising a determining step of determining whether the modification information is valid, wherein, when the modification information is determined being valid in the determining step, the modification assuring information is created in the modification-

assuring-information creating step.

20. An information processing method for processing original data created by a predetermined author, the information processing method comprising:

an original-data verifying step of verifying that the original data is assured as being an original;

a modification-information verifying step of verifying that modification information regarding a modification of the original data is assured as being true; and

a modifying step of modifying the original data in accordance with the modification information when it is verified that the original data is assured as being an original and the modification information is assured as being true.

21. The information processing method according to claim 20, wherein a digital signature for the original data is verified in the original-data verifying step and a digital signature for the modification information is verified in the modification-information verifying step.

22. A computer program that executes the information processing method according to claim 18.



23. A storage medium that can be read by a computer and that stores the computer program according to claim 22.